(No Model.)

G. A. SCHOLER.

CHUCK FOR WATCH CROWNS.

No. 553,265. Patented Jan. 21, 1896.

Fig. 1.

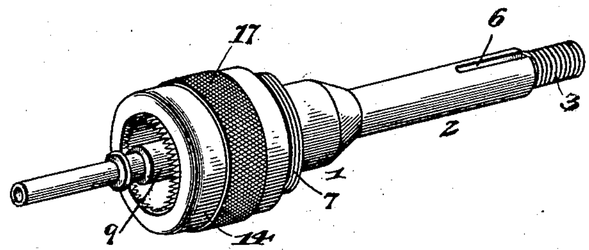

Fig. 2.

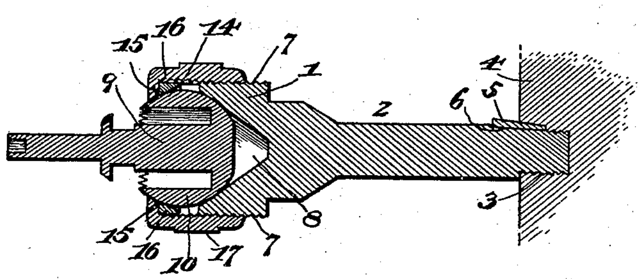

Fig. 3.

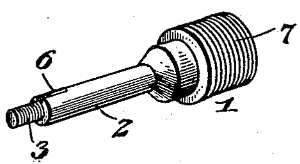

Fig. 5.

Fig. 4.

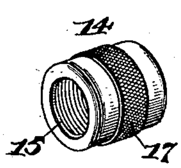

Fig. 6.

Inventor

Gustave A. Scholer.

Witnesses

B. S. Ober.

J. B. Owens

By his Attorneys.

C. A. Snow & Co.

ANDREW B. GRAHAM, PHOTO-LITHO. WASHINGTON, D.C.

UNITED STATES PATENT OFFICE.

GUSTAVE A. SCHOLER, OF SPOKANE, WASHINGTON, ASSIGNOR OF ONE-HALF TO J. C. STUTZ, OF SAME PLACE.

CHUCK FOR WATCH-CROWNS.

SPECIFICATION forming part of Letters Patent No. 553,265, dated January 21, 1896.

Application filed June 30, 1894. Serial No. 516,234. (No model.)

To all whom it may concern:

Be it known that I, GUSTAVE A. SCHOLER, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented a new and useful Chuck for Watch-Crowns, of which the following is a specification.

My invention relates to crown-chucks for use in connection with watchmakers' lathes, and the object in view is to provide a chuck which is adapted to hold watch-crowns of different sizes without adjustment, replacement or alteration of the back-rest or center; to provide a solid or single-piece back-rest or center to simplify the construction and avoid attachment, and, furthermore, to provide means for adapting the adjustable-cap of the chuck to fit crowns of different sizes, such adjustment being facilitated by washers or filling-pieces interposed between the cap and the surface of the crown-piece, and being unconnected with the cap to provide for adjusting the latter without turning the washer or washers upon the surface of the crown.

Further objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings, Figure 1 is a perspective view of a chuck embodying my invention, a watch-crown being shown in operative position therein. Fig. 2 is a longitudinal section of the same. Fig. 3 is a detail view in perspective of the chuck-head and integral stem. Fig. 4 is a similar view of the cap detached. Figs. 5 and 6 are detail views in section of washers having different interior measurements.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

l designates the head or body portion of the chuck, which is preferably formed integral with the stem 2, said stem being adapted to be attached in any suitable or preferred manner to a lathe. In the construction illustrated the stem 2 is provided with a threaded terminal 3 engaging a threaded opening in the lathe, a portion of which is shown at 4, and the stem being held from rotation by means of a key 5, which is arranged in a keyway 6.

The head or body portion of the chuck is exteriorly cylindrical and is threaded, as shown at 7, for engagement with the interior threads of an adjustable cap 14, and said head is provided with a solid conical back-rest or center 8, formed by providing a cavity in the head or body portion. The conical construction of the back-rest or center adapts it to receive and bear firmly against the surface of a crown 10 of any size, said crown being provided in the construction illustrated with a shank 9.

It will be seen that the smaller the crown the farther it will pass into the back-rest or center before bearing firmly against the surface of said rest or center, and hence it is necessary to provide for adjustment of the cap 14 in order to cause the inturned peripheral lip 15 of the cap to bear against the outer portion of the surface of the crown, the edge of said lip being beveled or flared inwardly to agree with the curvature or convexity of the surface of the crown.

Inasmuch as the extent of the adjustment of the cap is limited by the arrangement of the screw-threads which connect it to the head or body portion of the chuck, it is necessary to provide washers or filling-pieces 16 to fit within the cap. These filling-pieces, different sizes of which are shown in Figs. 5 and 6, have beveled interior faces to agree with the curvature of the surface of the crown and flat outer sides to bear against the inner surface of the lip 15, and said washers are of such a construction that the pressure of their inner faces upon the surface of the crown is sufficiently firm to hold the crown securely in place without injuring or marring its surface. After a washer of a suitable interior diameter has been arranged in the cap and the latter has been threaded upon the head or body portion of the chuck to bring the inner face of the washer in contact with the surface of the crown, said washer remains stationary or free from rotary motion during the further adjustment of the cap to cause the necessary firmness or positiveness of pressure.

Under ordinary circumstances I prefer that the lip of the cap shall not come in contact with the surface of the crown for the reason that the necessary rotation of the cap during

its adjustment causes frictional contact between said lip and the crown or between the crown and the back-rest or center, either of which is objectionable in that it is liable to mar the surface of the crown. Therefore I prefer to employ the washers which remain stationary with the crown and allow the cap to rotate therearound during adjustment, and by providing a number of washers of different interior diameters the desired pressure upon a crown of any ordinary size may be secured.

From the above description it will be seen that no adjustment of the back-rest or center is necessary. This simplifies the construction of the chuck and obviates the necessity of one means of adjustment ordinarily employed in devices of this class. Furthermore a solid back-rest or center provides a more firm and effective seat for the crown than an adjustable back-rest or center or a back-rest or center having an adjustable part or member, and this firmness is still further increased by forming the head or body portion of the chuck integral with the stem by which it is secured to the lathe.

The above construction obviates the necessity of providing a number of heads 1 of ordinary sizes, such a construction being common when the head or back-rest is not provided with an adjustable part or member.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from or sacrificing any of the advantages of this invention.

Having described my invention, I claim—

As an improved article of manufacture, the herein-specified watchmaker's chuck, comprising a stem having an exteriorly-threaded head formed in its outer face with an inwardly-extending conical cavity whose converging walls adapt the device for different sized crowns, and an interiorly-threaded cap to screw upon the said head having an inturned lip which is beveled in an opposite direction to the converging walls of the conical concavity, jointly with different sized washers removably and interchangeably fitted within the cap and lying wholly within the plane of the said inturned lip, each washer being beveled to correspond with the bevel of the said inturned lip and in an opposite direction to the converging walls of the aforesaid conical concavity, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GUSTAVE A. SCHOLER.

Witnesses:
J. C. STUTZ,
HATTIE L. MERRYWEATHER.